

Notice of Allowability

Application No.

09/700,956

Examiner

Keith Hendricks

Applicant(s)

MCLAREN, JAMES

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE and response of 07/21/2005.
2. ☒ The allowed claim(s) is/are 20-27 and 29-38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 20-38, drawn to a method for alcoholic fermentation comprising utilizing a fermenting microorganism and a mineral-rich yeast, classified in class 426, subclass 592.
- II. Claims 39 and 41, drawn to a composition comprising a fermenting microorganism and a mineral-rich yeast, classified in class 435, subclass 254.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process may be practiced with another materially different product, such as with a fermentation microorganism and free metals/minerals added to the culture without the mineral-rich yeast, or with a fermentation microorganism and a non-mineral-rich yeast. Also, the product may be used for fermentation processes other than alcohol production.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and because the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

During a telephone conversation with J. Cooper McDonald on December 12, 2005, a provisional election was made without traverse to prosecute the invention of Group I, claims 20-38. Affirmation of this election must be made by applicant in replying to this Office action. Claims 39 and 41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given during telephone interviews with J. Cooper McDonald on December 2nd and 12th, 2005.

Please amend the claims as follows:

Claim 20. A method for alcoholic fermentation, said method comprising employing in said fermentation at least two, different microorganisms:

- 1) a fermentation micro-organism; and
- 2) at least one mineral-rich or mineral-enriched yeast;

wherein said mineral-rich or mineral-enriched yeast provides a nutrient source for said fermentation,

wherein said mineral is a metal that is capable of altering the metabolism of said fermentation,
and wherein said alcoholic fermentation proceeds at an accelerated rate compared to the same
fermentation process without said mineral-rich or mineral-enriched yeast.

- In **claim 34**, line 3, please delete the phrase "any vessel between the two".
- Cancel **claim 28**. (limitation now incorporated into claim 20)
- Cancel **claim 40** (previously not entered, hereby officially cancelled)
- Cancel product **claims 39 and 41**. (see restriction, above)

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The following is an examiner's statement of reasons for allowance:

The process claims are allowed in light of the above amendments. In their specification, applicant has demonstrated that this particular combination of microorganisms, where the yeast is enriched by a metal that is capable of altering the metabolism of the fermentation (microorganism and process), results in an accelerated alcoholic fermentation by the microorganism, compared to the same fermentation process without said mineral-rich or mineral-enriched yeast. Applicant's specification provides evidence and explanation of the unexpected result, for example, at pages 7 and 20. The accelerated fermentation rate with the mineral-enriched yeast is "greater than when the mineral concentration is raised by the addition of the equivalent concentration of mineral when derived from a salt" (pg. 7 specification), i.e. direct addition of the mineral outside the yeast. Using zinc as the exemplified metal/mineral, page 20 of the specification states that "in all fermentation tests where sacrificial zinc yeast [i.e. that claimed] was added, fermentation speed was improved in comparison to the standard wort, wort with added zinc chloride, and, when tested, wort with added dead yeast, and wort with added zinc chloride plus dead yeast." Thus, each permutation was tested and compared, and the mineral-rich or mineral-enriched yeast of the instant invention provided a greater fermentation speed than the rest.

Given the teachings of the specification, as well as the state of the prior art, the skilled artisan would recognize and appreciate that metals other than zinc would be expected to function to alter the metabolism of the fermentation process in a similar manner. Pages 1-3 discuss the state of the art with regard to these other metals, such as magnesium and manganese. See also specification pages 5-6.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KEITH HENDRICKS
PRIMARY EXAMINER